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OTRAG ROCKET EXPERIMENTS IN AFRICA

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OTRAG ROCKET EXPERIMENTS IN AFRICA

Spiegel Report on the Rocket Experiments of the Holding Company Otrag in Africa

A Stuttgart rocket manufacturer has discredited the Bonn Africa policy and distressed the Federal Government. The black African states are observing with suspicion the business dealings of the West German company Otrag which is testing cheap rockets in Zaire under the protection of the potentate Mobutu, ostensibly for the peaceful use of the third world. But so far, only the Otrag partners have drawn a profit - from German tax money.

* /52

The object, 12 meters high, 80 centimeters thick, looks like a stove pipe. But actually it is a rocket. Hundreds of these pipes, bundled into a missile, are soon supposed to be launched into the African skies. In the Republic of Zaire, formerly the Belgian Congo, high quality German work is going on.

The first test firing on May 17, 1977, was a direct hit. To be sure, the projectile rose scarcely higher than a jumbo jet, but it struck a sensitive point in world politics when after a short flight it crashed as planned onto the African prairie.

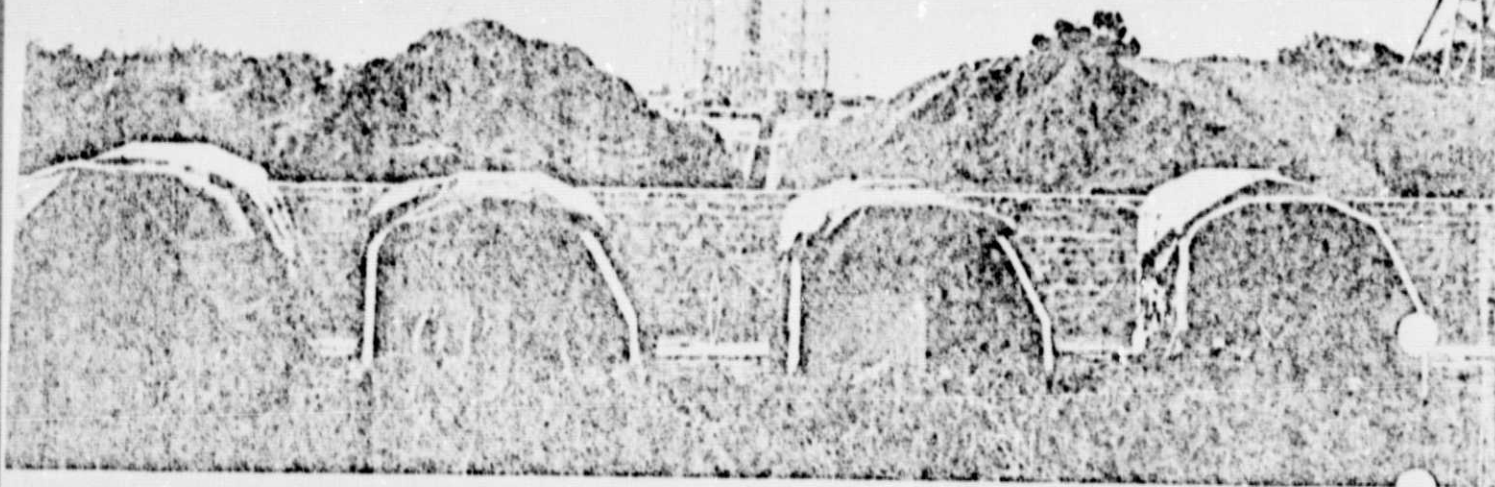
The Soviet party newspaper Pravda located an "act of western neocolonialism". The Angolian Prime Minister Lopo Fortunato do Nascimento exposed the rocket in a speech made before the United Nations as a "barrel aimed at the countries of Africa". The Zurich Tages-Anzeiger was worried that the rockets would be "practically just as good as carriers for atomic weapons".

And the central organ of the East German Socialist Unity Party Neues Deutschland [New Germany] disclosed the following in early July: "Otrag - cover company for the West German Armaments Industry". The West German rocket experiments, claimed even the American Chief

* Numbers in the margin indicate pagination in the foreign text.

H. Honeder

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Otrag rocket prior to launch in Zaire: A barrel aimed at the countries of Africa?

Delegate at the U.N., Andrew Young, in mid July, "gave East Germany the compelling motive to get involved in the latest argument over power in Shaba.

"For us Africans" warned the newspaper New Nigerian, "it is a matter of life and death". The American men's magazine Penthouse found out the Germans don't care about conquering the world. Rather the Bundeswehr in conspiracy with the Federal News Service in Zaire, is testing cruise missiles and medium range rockets made in Germany.

On his trip to Africa in late June, the concerned leaders of the black portion of the earth such as Zambia President Kaunda, informed West German Chancellor Helmut Schmidt: "Something is bound to happen here." Again at home in Bonn, Schmidt consulted

with his cabinet about what the Government could do against the German Company "orbital transport-~~und~~ Raketen-AG" (Otrag). Scarcely had the Chancellor reported the suspicion of the Africans concerning the rocket venture in the bushland, when the Secretary of State in the State Department, Klaus von Dohnanyi, asked leave to speak.

He called for Draconian action: In spite of free foreign trade, the Federal Government must, he said, put a total export embargo on the operation. The hero of the Mogadisho mission, Hans-Jürgen Wischnewski, recommended that "an unflinching man" should look to the right in Africa and force Zaire head of state Mobutu Sese Seko to take action.

But the debate was adjourned right away. Helmut Schmidt appointed his Minister for Economic Affairs, Otto Graf Lambsdorff, to list in a cabinet report all of the possibilities with which the German rocket company might be stopped. Foreign Minister Hans-Dietrich Genscher summed it up: "The foreign policy damage is so great that in any case something must be done."

Quite true. Never before has a private small German company got the official foreign policy in such a mess as Otrag has now done. The company, located in Stuttgart and Neu-Isenburg, which tests rockets in the eastern Zaire province of Shaba in a territory the size of East Germany, intends in the near future to launch satellites into outer space for developing countries - and possibly not just this.

For in the lease between the Republic of Zaire and Otrag, President Mobutu Sese Seko stipulated that the West German Rocket Manufacturer may use the lease "territory for purposes of launching missiles into the air and outer space, no matter what kind and type of construction, in particularly booster rockets, without any restrictions".

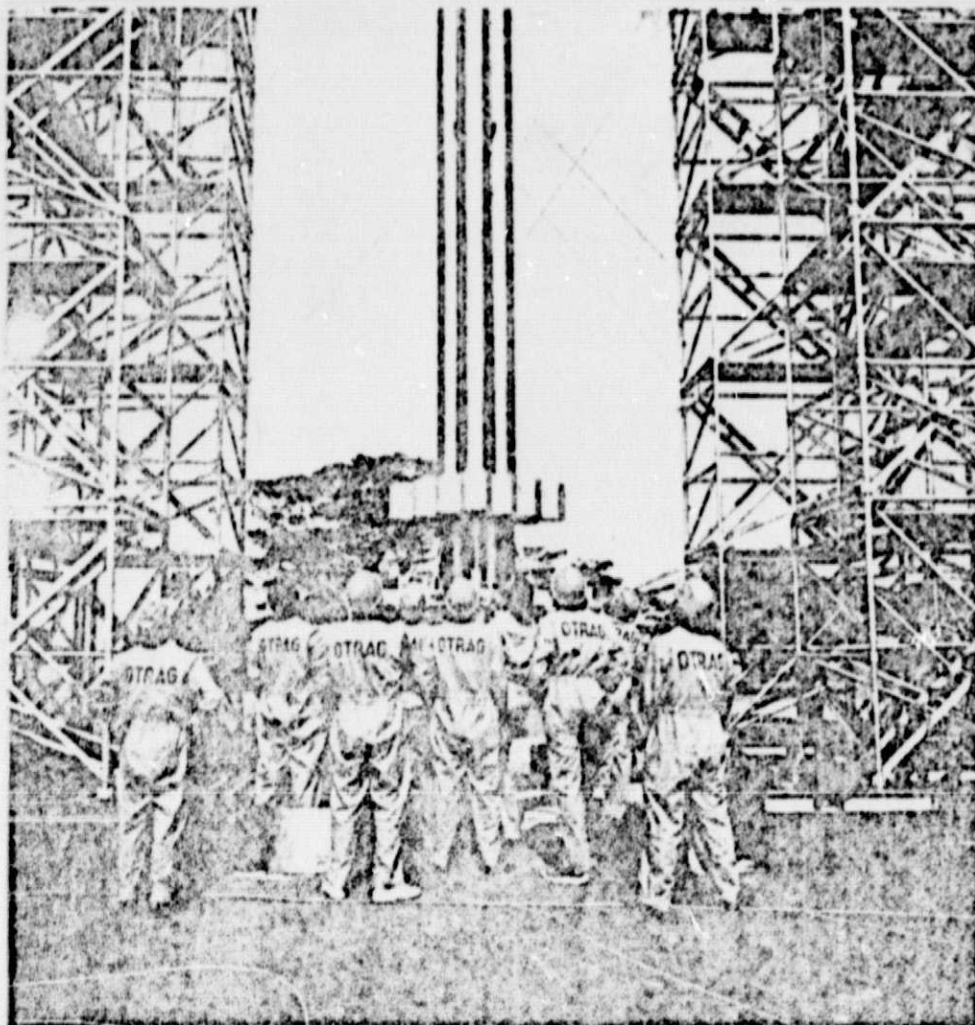
The word "peaceful" does not appear in the 16-page contract. In their colony, the Germans can do and let do as they please.

The International Peace Research Institute, Sipri, in Stockholm, has already warned that Otrag is promoting "in this way the spread of militarily useful rocket technology as well".

For reconnaissance satellites launched into orbit with Otrag rockets will promote not only the prestige of the nations to whom the Otrag sellers offer their means of space transport. They create new military ambition and affect the heretofore monopoly of the super powers which for the time being still reserve for themselves the launching of military satellites.



Zaire President Mobutu, Otrag head Kayser: Dream of their own Cape Kennedy.



Assembly of Otrag rocket: Experience from the National Socialist Era.

Countries such as Zaire, Brazil, Sri Lanka or Indonesia, Otrag announces that it will link them with the technological knowhow of the industrial nations. No wonder that in the neighboring country of Zaire this wakes memories of World War II German Rocket Weapons, the manufacturers of which first opened the international space age. /54

"He is Doing it Like we Did in Peenemünde"

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Likewise the German rocket architects at Peenemünde and at the secret test facility Trauen (in the Lüneborg Heath) did not,

from the outset in 1936 linger long with the problem of whether a rocket designed for peaceful purposes could also be used for military ends. Above all, they were concerned with mastering the technique.

Before and after the war, the rocket experts Wernher von Braun, Kurt Debus, Eugene Sänger, Irene Bredt and Wolfgang Pilz did not make any bones about the fact that rockets can be used not only for the peaceful conquest of space. Von Braun and colleagues developed the V2 at Peenemünde to destroy London. It was Sänger's "secret commando affair" to realize the design of a stratospheric glide bomber with which "from a point of attack in Central Europe an individual person can be shot on the other side of the earth" - specifically, Sänger was thinking, in New York. Both weapons systems were the forerunners of the modern US cruise missile, jet-propelled warheads which can detonate with pinpoint accuracy at a pre-programmed target.

Otrag head Lutz Kayser, 39, sees himself in this German tradition. This certified engineer is a pupil of Sänger and a close friend of Wolfgang Pilz. This new generation design engineer also has business ties with Kurt Debus, until 1974 head of the NASA John F. Kennedy Space Center in America, and with fuel expert Irene Bredt.

What's more, Kayser's Zaire project is making use of experience once collected by his models, teachers and accomplices in the National Socialist era.

In May 1945, the Peenemünde engineers wanted to mass produce "Project Waterfall". In the opinion of experts, this was the "best German antiaircraft rocket". The projectile resembled the V2 and during the testing phase it snatched Allied bombers from the sky. Co-designer Wolfgang Pilz recalls: "The Kayser rocket is Project Waterfall. He is doing like we did in Peenemünde."

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At war's end the victors went in pursuit of the German rocket experts. Von Braun and Debus went to the United States and developed countless military rockets before going over to NASA. Pilz, Sänger and Bredt were pocketed by France. The French got a head start on a Russian Search Party which, furnished with a personal order from Stalin, was supposed to take Sänger to the Soviet Union.



Otrag critic Kaunda, Chancellor Schmidt: "Something's bound....

OTRAG - Deckfirma für BRD-Rüstungsindustrie

- „Dagens Nyheter“: Entwicklung von Flügelraketen in Zaire
- Regierung in Bonn unterstützt Tests mit Millionenbeträgen

Stockholm (ADN-Rost). Die OTRAG ist eine Deckfirma für die BRD-Rüstungsindustrie. Mit Billigung und Unterstützung Bonn entwickelt und testet die Flügelraketen. Sie besitzt in Zaire den Status eines Kolonialherren des 18. Jahrhunderts. Zu diesen Schutzmaßnahmen kommt Skandinavien eine große Fälschung, die Stockholmer „Dagens Nyheter“, in ihrer Sonntagsausgabe.

Der Bonner Korrespondent des Blattes schreibt, daß die Firma innerhalb eines in Zaire bis zum Jahre 2000 geschätzten 100.000 Quadratkilometer großen Gebiets wie ein Kolonialherren des 18. Jahrhunderts

regieren kann. Vieles deutet darauf hin, daß die OTRAG in Wirklichkeit eine Deckfirma für die wichtigsten Unternehmen der BRD-Rüstungsindustrie sei. Es gebe auch handfeste Beweise dafür, daß die Regierung in Bonn die Entwicklung der OTRAG-Raketen mit Millionenbeträgen unterstützt.

Sehe man sich die OTRAG und die Männer hinter ihr an, dann werde immer deutlicher, daß hier die Raketenentwicklung fortgesetzt werde, die einst mit Hitlers V 1 und V 2 begann, heißt es in der Zeitung. Einer der Männer der V 1, Eugen Sänger, habe lange hinter dem Forschungsinstitut gestanden, das zur OTRAG umgebildet wurde. Seine Witwe ist Mitglied der Unternehmensleitung.

Zu den Experimenten mit Flügelraketen schreibt „Dagens Nyheter“, der BRD Flug-



Von dem Start einer OTRAG-Rakete in der zentralen Shaba-Region. Foto: J.B. Bonn

Forschungs-GmbH habe zwei leistungsfähige Anlagen besitzen, aber dennoch

...to happen": Otrag denunciation in German
Socialist Unity Party Newspaper
Neues Deutschland
[New Germany]

With his propellant experiments he is risking his father's house.

The trio continued the Waterfall Project in France and for the first French rocket "Veronique" they experimented with nitric acid and heating oil as fuel. In 1954, Sänger, who in the meantime had married Irene Bredt, returned to Germany. In Stuttgart, he was helped by 27 companies and Daimler-Benz director Bruno Eckert to found the Institute for Jet Propulsion Physics - the design office where the Waterfall Projectile was further developed.

Three years later, in a "Study Group for Rocket Techniques and Space Travel" at Stuttgart University, Sänger became a teacher of 17 year old high school student Lutz Kayser. At that time, the young student Kayser also began a friendship lasting several years with Wolfgang Pilz. "With his propellant experiments," reported Pilz, "Lutz was risking his father's house, everything was burned black." His father, chairman of Südzucker AG, helped his son move into a quarry.

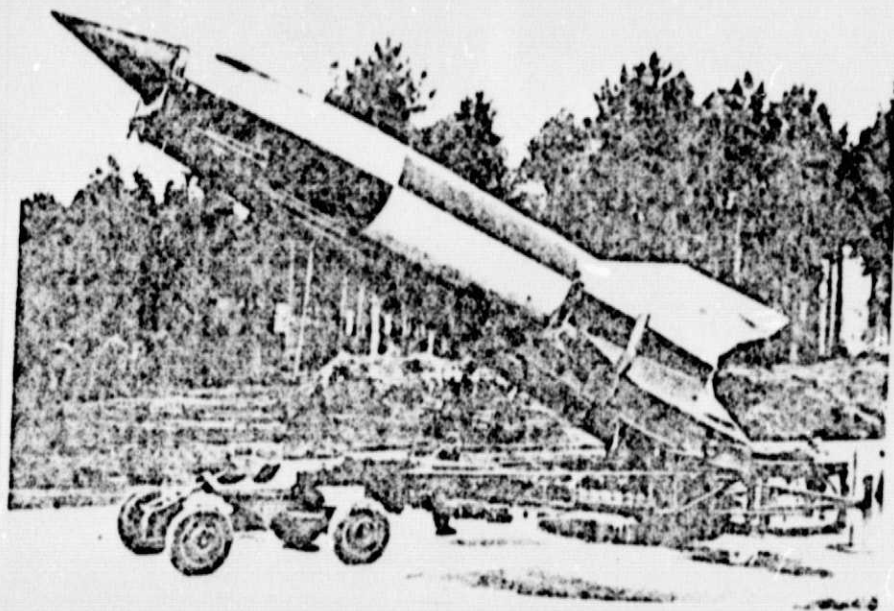
There Sänger's pupil, together with friends, tested rocket boosters on his own test stand - a stone's throw from a factory owned by Südzucker AG, which was burned to ashes in a million-

dollar fire in 1967.

Sänger, who had fought a long but successful battle for the construction of a rocket test stand in Larpoldshausen in Baden, in the meantime was himself building rockets elsewhere: In Egypt. Nassar paid Sänger 200,000 marks for him, together with Pilz, to found a company Intra-Handels-GmbH [Intra Trade Ltd.] for exporting technology, to bring Project Waterfall to the Nile and to lay the cornerstone for Egyptian rocket production.

Since 1970 a Company for a variety of Purposes.

But because Israel thought itself in danger, Bonn enticed the fussy German back. In 1963 with a call to a professorship at Berlin Technical University where the professor continued his studies (an example: "Radiation Physics of Photon Radiation Propellants and Weapons Radiation") until his death in 1964.



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German V2 Rocket^{*}: First step into the space age.

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Rocket Designer Sänger (r)*: Project
Waterfall brought to the Nile.

*Top: Captured by British troops: Bottom: With wife Irene
Sänger-Bredt in 1958 at the Third International Astronaut
Conference in Stuttgart, in front of the V 2 thruster.

Sänger's companion Pilz, official director of the Egyptian Rocket Program, was less happy about pulling out of the Near East affair. Pilz claims that he intended to convert the Waterfall Missile into a three-stage space rocket. But the Israelis were of another opinion. "Pilz built weapons which will be used only to destroy Israel," claimed the government in Jerusalem. The Israeli Secret Service sent Pilz a package by mail. When opened, the contents detonated and Pilz's secretary was blinded.

At that time the second rocket stage was "finished and had flown beautifully," recalls its designer. Nevertheless, he was dismissed.

After losing the Six Day War in 1967, the Egyptians dropped their rocket venture. Pilz returned to West Germany.

On the basis of his Egyptian experiences, he developed a simple three-stage rocket (according to Pilz, "the power plants were comparable to the Otrag development") and he recommended a study to the Federal Government when the Europeans were drawing up plans for their own space rockets in the late 1960's.

Two years after his engineer exam, Lutz Kayser founded "Technologieforschung GmbH" [Technology Research, Ltd.] in 1970 and since then, according to the commercial register, he has pursued a variety of business objectives with his company: "Development, production and marketing of technical and scientific equipment, in particularly in the area of space technology, missile technology, rocket power plant technology, electronics, marine research, automatic control technology, optics, optoelectronics, environmental pollution research, engine and turbine technology, measurement technology, corrosion research, medical technology, surface finishing, reaction kinetics, lasers, materials, fluid control technology and technical research and consulting for third parties in these and related technological areas".

Friendly Advice from an Old Colleague

Kayser has about 35 employees working under him in Stuttgart. Twenty-five percent of the company is owned by Kayser's brother Manfred, who is employed full time as manager at the Lindau plant of the German Aeronautics, Space and Weapons Company Dornier.

Dornier, in turn, on behalf of the Bundeswehr, is developing small cruise missiles for reconnaissance, antiaircraft and for attacking enemy positions. Naturally, this is not being done in Lindau. Asked about overdue testing, Dornier spokesman Rolf F. Christ answered: "Our problem is, we don't have a test range."

The big moment for the Kayser Company came in 1971, when the Bonn Research Department granted 3.57 million marks for the development of the Kayser Power Plant. It was tested on the test stand of the German Research and Test Center for Aeronautics and Space Travel (DFVLR). Test director Armin Dadieu, the former personal deputy of Hermann Göring for mineral deposit research in Austria and regional head of Styria, brought in an old colleague for his opinion: Wolfgang Pilz. In the meantime, in his tract home in Nellingen near Stuttgart, Pilz had long pondered over the idea of fueling rocket engines with commercial diesel oil and nitric acid instead of with expensive special fuels. It was no wonder that Pilz's opinion of the Kayser plan turned out positive. Kayser uses the same principle, even if it claims that it is their own invention (see box, page 62). /57

The DFVLR testers, in their final report of July 31, 1975, came to the conclusion that the "technical concept" is "fundamentally feasible".

Kayser's application for a Federal Bond of over 300 million marks was nevertheless shelved in Bonn. The civil servants in the Bonn Ministry of Research had checked over the allegedly inexpensive project and "came up with disastrous figures," according to their former chief, Hans Matthöfer.

In the meantime, on October [date illegible] 1974, the rocket inventor had founded Otrag with which Kayser's research findings were to be turned into technical reality and money. In their capacity as "prentices" for the Kayser shop, DFVLR Institute director Theo Peters, atomic physicist at the University of Stuttgart, living in the Nellinger tract home of his friend Pils, Lindenstrabe 123, and the widow Irene Sanger-Bredt - one "the most important researchers in the world" according to "Welt am Sonntag" published by Springer - signed on behalf of the company.

The Sanger group got Pezomunde expert Kurt Debus to serve as their chairman of the board. He had returned to Germany after retirement at Cape Canaveral.

The company set up by Kayser would not have succeeded if highly talented professionals had not come to work for him from other jobs.

How one can turn ideas into capital and cash had already been successfully shown by co-founders Werner Will and Walter Kuffner, both businessmen. Will was previously chairman of Atlantis Airlines which went bankrupt, and Kuffner was director of the Munich IOS Bank.

Will, in turn, from the days of successful transactions for Atlantis, had contact with Munich CPA Otto Schreiber, whose involvement was to prove to be extremely beneficial for the future destiny of Otrag. Once he recruited the first investors for Otrag with his "CTM Control Treuhand Munchen GmbH" [Control Trust Munich] once he checked Otrag's books and balances with his Ring-Treuhand GmbH [Ring Trust Ltd], then he showed up in Zaire as "employee, authorized representative and financial consultant" of the company.

On the basis of their Atlantis experiences, Will and Otrag employee Schreiber knew how to attract excess money from the pocket

of big earners by means of substantial depreciation blessings of the IRS, under a very reliable cover: "we are not making a limited partnership, but a corporation. It is just a little more credible" (Will).

The two-man corporation Otrag - at present, Kayser hold 74 percent and the Frankfurt shipping agent Carl Eberhard Press 26 percent - therefore provided itself with an "Otrag silent partner", whose members, according to contract, were allowed to invest up to 300 million marks. For their investment, thanks to a fortunate decree of the Offenbach-Land IRS, cashed in on a tax relief of up to 326 percent because they were supplying technology to the African bush.

"As a Soldier, Mobutu Knows what Reconnaissance Means"

The duo of Will and Schreiber had still another acquaintance from their days together at Atlantis: Fred Weymar, a first class international financier who, like Kuffner, had also managed ICS Banks for money magician Bernie Cornfeld.

Touched for money by the moneymakers, Weymar was not liquid right then, but he was helpful. At first asking "what do I have to do with rockets," he let Kayser explain the profit prospects to him and then he knew immediately what to do. For the manager boasts of his friendship with the richest Black in Africa, Mobutu Sese Seko.

In the autumn of 1975, Weymar went on behalf of Kayser to see his friend - to whom he had already previously introduced another friend, the CSU party chairman Franz Josef Straus - and "Mobutu had nothing against it" (Weymar). The former Frankfurt resident, who now jets on business from his villa in Monaco to London, Munich or Kinshasa, and who also staged the television spectacular between Mohammad Ali and George Foreman in Zaire for the greater fame of Mobutu, introduced Lutz Kayser to the Congo Potentate on November 30, 1975.



Otrag Promoter Pilz (seated on the right):
Packages from Israel.
1963 during a television interview in Cairo.

"After a mere thirty minutes," according to Kayser, Mobutu was fired up by the idea. He was enraptured by the tempting prospect of being able to pose as the African Head of State with a reconnaissance satellite in space. He raved in front of Kayser and Weymar about having the "African Cape Kennedy" in his kingdom. According to Kayser, Mobutu was the first politician to clearly recognize the commercial importance of the project. He knew that it would bring prestige and perhaps money."

Of course, Kayser also explained the other side of the project to the ruler: "As a soldier, Mobutu knows what reconnaissance means. He would like to see the cream on the table of the president next door.

Six days later the preliminaries were already taken care of. Otrag submitted to the President's Office in Kinshasa the first draft of a treaty which - to the pride of board chairman Debus - is almost an exact copy of the treaty with which the United States annexed the Canal Zone from Panama in 1903. On March 26, 1976, /58 presidential advisor Bokana W'ondangela and Kayser signed the document in Kinshasa.

Contents: Mobutu cedes to the white entrepreneurs four percent of his state territory for actually unrestricted use. In return, Otrag pays him an annual lease 25 million Zaires (which converts to 62.5 million marks), the term of payment for which Mobutu has extended for his German friends, naturally without interest, until that point in time when the first commercial booster rocket is successfully launched.

The text of the treaty (see box) was first made known after a Zaire opposition group stole the document from the Zaire Embassy in Bonn.

With the assumption of power in their colony, right next to the border to neighboring Tanzania and Zambia, the Kayser devotees were immediately able to get around several hurdles. According to the 1955 German treaties, Germans are forbidden to produce militarily usable rockets or rocket power plants on West German territory.

Since anyway a suitable launch location could not be found in densely populated West Germany, the new Pennemünde generation originally wanted to launch their rocket from launching ships. But there was an insurmountable problem: The UN convention, which stipulates that everything launched into space must bear the national emblem. Bonn did not want to lend the eagle to this project.

The colonial treaty with Mobutu, which also stipulated that the Otrag rockets show the coat of arms of Zaire proved, of course, to be other than pregnant with profit: The responsible IRS office

in Offenbach-Land decided that the lease paid by Kayser for its protectorate, although extended without interest by Mobutu, could be credited to the Otrag investors as a tax loss in the amount of 58 million marks annually.

The isolated decision, which extremely promoted the growth of Otrag, was taken by the head of the Offenbach-Land IRS office, Reinhard Hock - "without [word illegible] of existing administrative regulations and in spite of doubtful legal principles," as later denounced by the presiding finance ministry in Wiesbaden.

But approvals granted by an IRS office are binding even if they come into force "in the face of disregarded regulations" (Ministry Spokesman, Fritz Rückel).

"Free of all Taxes"

From the treaty between Zaire and Otrag

On March 26, 1976, the Republic of Zaire and Otrag signed a "treaty concerning the unrestricted use of a territory" in Africa in force until the end of the year 2000.

Extract:

The term unrestricted use includes any activities involving the surface of the ground, such as, among other things, the removal and building up of elevated areas (mounds, hilltops, etc.), construction of underground cavities, establishment of water surfaces of any sort etc.; the construction of airports and all structures associated with them; the construction of structures above and below ground (no matter what kind) among other things, launching platforms, energy plants, observation and measurement stations, remote control and radar facilities, production operations of the sort).

The state expressly grants to Otrag without restriction the right to take all measures which Otrag considers necessary in exercising unrestricted right of utilization in the territory. The

territory is duty-free territory. Otrag, its executive body, its employees of other than Zaire nationality and their dependents are free of all taxes of the state, no matter what kind. Otrag, its employees and their dependents enjoy immunity from any legal prosecution in the state with respect to actions performed by them in the execution of their duties assumed from Otrag during their stay in the state and thereafter.

The State has to permanently close off the air space over the territory to air traffic. Otrag retains the right to lay out airports of its own selection at locations in the territory to be determined by Otrag and to operate them with all of the pertinent provisions. Otrag has to right to operate communication and radar facilities, in particular by means of communication satellites.

Only those persons may stay in the territory who have express permission to do so from Otrag. The State is obliged at the request of Otrag to evacuate all other persons from the territory and keep them away from it. No observations, whether in picture, sound or writing, may be made in the territory without the consent of Otrag.

Otrag bears no responsibility for environmental damages resulting from the manufacture and launching of missiles into air space or outer space. So far as damage to life, health, property and possessions of humans come into consideration Otrag is committed to take out liability insurance for this. With the first operational booster rockets, Otrag is committed to launch an experimental reconnaissance satellite into space for the State at no cost.

Otrag is intitled to exclusive use of the territory until the end of the year 2000. This right, on whatever legal grounds, cannot be withdrawn by the State.



- Key: a. Otag rocket test site
b. Rocket launching pad
c. Size comparison with West Germany

Since 1977 - as agreed by the company with the Hessian Ministry of Finance - Otag clients have no longer been allowed to take advantage of the fictitious lease interest rates for tax purposes. But the Otag financiers know how to help themselves: To let the tax monies flow farther, just then they want to "increase the technical expenditure for research and development".

/59

The winner in the transaction was and is Otag. The loser is the State Treasury - and director Hock. In the words of Hesse Minister President Holger Börner: "We have seen to it that he has been dismissed."

The alert instinct for private earning opportunities and the sleepiness of the bureaucracy allow Kayser's tax rocket to roar further into the blue without stabilizer and without altimeter. And occasionally the Ministries in Bonn provide help - sometimes accidentally, sometimes out of stupidity.

So Foreign Minister Hans-Dietrich Genscher did nothing to divert the foreseeable foreign policy anger because of the Kayser project in Zaire. On the contrary, he bestowed an additional



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Otrag Promoters Mobutu and Weymar, a
Financier of the Top Rank.

consecration on the rocket group when exactly on the day of the first rocket launching, on May 17, 1977, he paid an official visit to Zaire and the test province Shaba.

It also turned out to be thoroughly beneficial for Otrag that a substantial equipment plant was found immediately - construction equipment and aircraft - which is indispensable for the logistics of the enterprise. From the West German Landesbank, Kayser was able to acquire the construction firm Stewering and Son from bankruptcy stocks - together with a lucrative contract that the Bonn Ministry of Development had already granted to the Zaire Concrete Works several years earlier. When ownership changed, Stewering was involved in laying a bridge over Lukuga River for ten million marks from the federal budget. This structure extended into Kayser /60 territory exactly at the northern border.

At the same time, at a British Air Force auction, Kayser acquired discarded flight equipment, two Hawker Siddeley "Argosy"

propeller aircraft which since then have shuttled between Munich-Riem and the airport scraped out by Stewering bulldozers right next to the rocket platform.

"They Have Absolutely No Landing Rights."

Hardly were the letters Oras (for Otrag Range Air Service) painted on the flying boxes, when Kayser once again tapped the German treasury for money. In the summer of last year, Bonn Foreign Ministry chartered the aircraft to transport humanitarian aide to Shaba torn by rebellions.

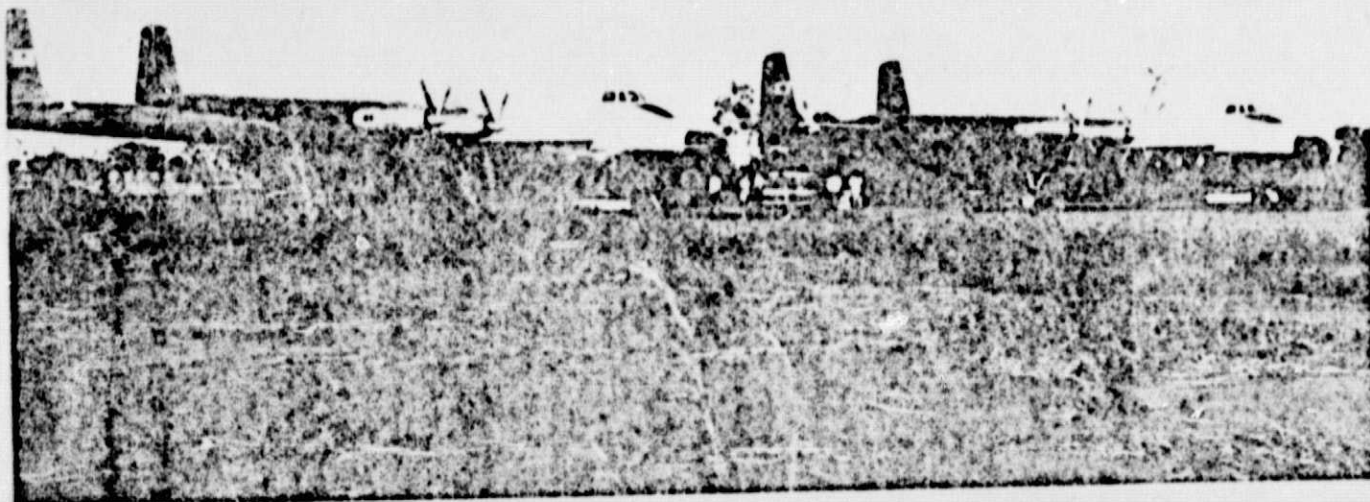
Kayser pocketed 945,000 marks (according to the bill sent to the Federal Treasury) for "315 flight hours at 3,000.00 marks" and for the transport of 212 metric tons of foodstuffs, 20 metric tons of gasoline and 0.7 metric tons of medical supplies from Kenya to Shaba.

And Kayser wants even more. At present, it was cabled home in February by a spy sent from Bonn, he is having the bush surveyed for a 4000 meter long concrete airstrip which - according to the emissary's report - is suitable "for technical stopover landings in transcontinental traffic". Once "Luvua" (pilot code name) airport is finished - Otrag sought "construction engineers and concrete construction foremen through advertisements in the "Süd-deutschen Zeitung" - then jets, for example, for the white people of South Africa could land in the Kayser Colony to refuel, instead of in Nairobi or on the Cape Verde Islands as is presently done - and thus they would not be dependent on the good will of foreign governments.

Head of the airline in Shaba's capital Lubumbashi is Lutz Piekatz, fulltime innkeeper and director of the "Hotel du Parc" in which, one year ago, he held two German journalists (from "Stern") under arrest in their rooms. If Piekatz doesn't exactly show too much concern for his guests, he maintains radio contact with the wider world in his soundproof control room. Piekatz also



Rocket Builders von Braun and Debus:
 High polish brochure for Otrag.
 (Taken in 1971 with Apollo Astronaut Dave Scott (left)
 in the control room of the American Space Center
 at Cape Kennedy.)



Otrag Transport Planes on the Companies own
 airport in Zaire: Ardennes ham for Lubumbashi.

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has the provisions for his restaurant (specialty: Ardennes Ham) flown in with his airplane - and the supplies for Otrag.

Always when the pilots of the thundering boxcars shuttling between Zaire and Bavarie show up in Munich-Riem after each 18-hour flight, there is, reports one pilot, "alarm among us. They have absolutely no landing rights".

But they always come on down, three times in the last three months, and then load up - without export approval, according to research by the Ministry of Economics - rocket parts which Kayser has either assembled in his own workshop or buys elsewhere: For example, from Krups (the specially welded bodies) or Bosch (the automobile windshield wiper motors, which are used for valve control mechanisms).

The more often Kayser of course launches his rockets - during the third test in June, the rocket plummeted like a rock back to earth after traveling a few meters - the more important a new project becomes to him. He needs his own large factory, because he must assemble hundreds of individual modules for operational rockets.

He already knows how he will manage this: With the help of the taxpayer. The factory will be located either in zonal border territory or in other poor regions of West Germany where the Treasury dispenses subsidies for new jobs. Hard negotiations for public money have already been carried out with the Hessischen Landesentwicklungs- und Treuhandgesellschaft (HLT) [Hessian State Development and Trust Company] for a factory in Kassel. Recently, Bremen has also been under discussion where the aviation concern VFW Fokker is fighting for its existence. And whenever obstacles arise, Kayser grabs for a proved means of applying pressure: He threatens to emigrate to France. Weeks ago, Kayser set up an Otrag grant in Paris on elegant Avenue Foch.

At home, his second stockholder, the Frankfurt Shipping Agent

Carl Eberhard Press, is helpfully at hand. Press, among other things, boss of Deugro-Spedition [Deugro Shipping], which in January 1978 acquired the Berlin sidewalk newspaper "Der Abend", is also involved with 12 million marks as a silent partner with Kayer, along with his twenty six percent share of Otrag capital stock.

Contacts with a Powerful Aerospace Concern

For Braun AG of Frankfurt and its parent company, the US concern Gillette, which, besides razorblades, also manufactures electronic equipment, Braun chairman and member of the Otrag supervisory board Albrecht Schultz observes the course of business. He gives the air of being euphoric: "Kayser has accomplished what Peenemünde failed to accomplish. Now we must clarify which industry is involved with a consortium".

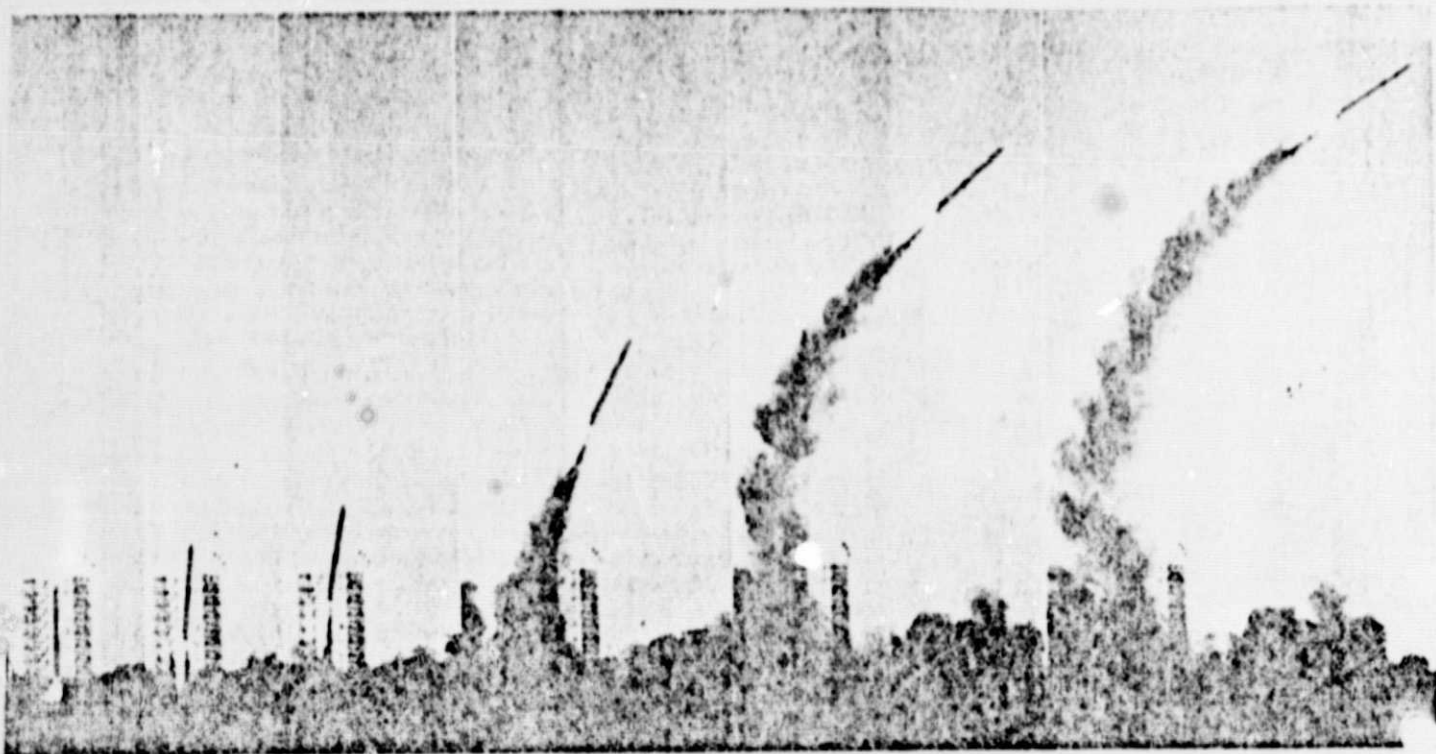
Otrag will also get help from Rolf Huhn, a friend of Debus, who has the top job at the Frankfurt branch of the distinguished Munich banking house Merck, Finck & Co. At Huhn's initiative, contacts were arranged with a powerful concern. The Munich aeronautics, aerospace and weapon making company, Messerschmitt-Bölkow-Blohm (MBB) which now - according to Debus - is carrying on an "exchange of experts" with Otrag, even if the company management still turns up its nose at Kayser's cheap rockets. /64

Otrag has also received friendly gestures from other quarters: Wernher von Braun wrote a highly polished brochure for his colleague of the Peenemünde and Cape Canaveral years, Kurt Debus, entitled "How Satellites can Help Developing Countries". The Bonn Ministry of Research granted Kayser's company "technology research" one million marks between 1974 and 1976 for a project called "development of a binary system for orbit and position control of... satellites".

The United States Sabre Foundation in Santa Barbara, California, published by Debus an "Earthport Project" and wrote letters of

to the governments of Liberia, Indonesia, Sierra Leone, Panama and the island state of Nauru (Pacific). Most of the countries responded favorably: They would be willing to provide open territory for rocket launchings. Kayser himself negotiated with Sri Lanka, Indonesia and Brazil for possible alternative quarters, just in case he should ever have to give up his Congo Reservation.

The Arab League, reports Debus wants to buy one of the first Otrag missiles to lift a communications satellite into space. Studies are in progress on the satellite, which is named Arcomsat (Arab Communications Satellite) - on behalf of and funded by the Bonn Research Department - at the following companies: AEG Backnang (1.02 million marks), AEG Ulm (0.34), Dornier (0.61), MBB (1.84 and 1.79) and Siemens (0.12).



Aborted Otrag Launch in June 1978: After liftoff, sideways into the bush

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No matter if an operational Otrag projectile is ever blasted into the skies, no matter for what purpose Kayser may use his colony in Zaire - the organizers will come out all right in any case.

Kayser companion Werner Will, for example, sold his Otrag footing at five times the price (2.5 million marks) to Kayser and in a consultant contract guaranteed himself "twenty percent of everything that comes out of Otrag".

"Of Course, Everything can be Misused for Military Purposes."

And Otrag chief Kayser has received consultant advice from Sanger's friend Armin Dadieu both in the form of official expert reports and also on private matters, namely the Peenemunde further development of Project Waterfall. District chief Dadieu received 200 million marks.

On top of this, Kayser sold his knowhow to Otrag, and thus in large part to himself, for a special price of 150 million marks. Twenty five million of this the company paid to the boss in cash. The payment of the remainder is extended against 5 percent interest - as a loan, which the silent partners, who so far have underwritten 95 million marks, can in turn show to the Treasury as a loss in their tax returns. This has been so stipulated by the Offenbach-Land IRS office.

Bonn has to support the political costs of the Kayser operations. Otrag candidly advertises in its sky blue brochures with the construction of a ballistic rocket which in no way is intended to circle the earth, but will have a range of "1000 kilometers" with a carrying capacity of "5000 kilograms".

If asked about the usability of his invention for military purposes, Kayser bluntly that "of course, everything can be misused for military purposes".

Debus openly flaunts the fact that "with this rocket Germany would be a world leader".

And Mobutu's friend Weymar is openly offering the Zaire property for a high price: "If others need a firing range - our site is unique. There is nothing like it in the entire Nato region."

With such forward publicity it was inevitable that the political powers would [word illegible]. Since last autumn, the Soviets have been protesting the "active rocket ambitions of the West German General Staff and of the largest West German concerns of the military industrial complex".

In order to mollify the Kremlin Chief, in the week before the arrival of Leonid Breschnews in Bonn on April 27, 1978, Chancellor Helmut Schmidt signed the "36th order to amend the export register". Since this "Lex Otrag", as Kayser calls it, was passed, every rocket shipment, every export of individual parts must be approved.

For the Chancellor's office and the foreign office even this is too little: They are pushing for a total export ban for Otrag, which can be imposed as per paragraph 7 of the Foreign Trade Law /65 if there is any fear that economic activities might "considerably interfere with" foreign policy interests of the Federal Republic. For legal reasons, however, the Department of Commerce raises objections to such a verdict.

In the meantime, the Stuttgart Company has pressed the sluggish process for export approval in Bonn through a Frankfurt firm of attorneys, the most prominent partner of which is former CDU Chancellor candidate Rainer Barzel.

The Bonn Government is too Cowardly

For Zaire's neighbor Angola, the measures taken by the Federal Government so far are not sufficient. The left regime refuses to

carry out the overdue ambassador exchange with Bonn as long as the West German rocket manufacturers continue their mischief in Zaire.

For months, Bonn diplomats have been negotiating, so far in vain, with Mobutu over a government agreement in which Zaire would be obliged to keep the activities of Otrag under control. As a precaution, the Chancellor warned the French President Valéry Giscard d'Estaing and Brazil President Ernesto Geisel against helping Kayser in case he should emigrate from West Germany. Complains Kayser: "The Bonn Government is too cowardly."

And yet, the political complications may yet turn out to be a blessing for Kayser. Should the politicians in Bonn or Kinshasa take away the basis for his controversial rocket business, then he can explain to his investors, if the millions turn to dust, that the successful countdown was prevented not by a lack of efficiency, but by political scheming.

Then the rocket millionaire can set out on new projects, this time not above the ground, but below it. A short time ago, Bonn's then Minister of Research Matthöfer credited him with 764,068 marks in tax money for studies on high pressure gasification of coal.

One consolation for his financiers, who would then be left peering in vain down the tubes of Otrag rockets, could be Kayser's inexhaustible confidence: "We are thinking of exploiting underground resources. The results are supposed to be uranium on our rocket site."

The Treasury is spending tax money, you know, for prospecting for and mining the atomic metal.

A Porsche Made from Bicycle Parts?

The Kayser Rocket in the Opinion of the Experts

From about 1980 onward, promised the Stuttgart engineer Lutz Kayser three years ago, he would control "the entire commercial market for geostationary satellites" - with his pioneering invention, the Kayser inexpensive rocket.

What he had in mind here was a kind of "ugly duckling" for space: Plain and inexpensive parts throughout, where other rockets have shiny chrome.

Instead of costly, honeycomb-reinforced light metal alloys, for example, which form the outer skin of U.S. rockets, simple nickel steel pipes, welded together pipeline fashion, will form the body of the rocket (and at the same time the fuel tanks).

The bundling principle, which of course has already been used by Wernher von Braun for the U.S. moon rockets and by the Soviets for their Wostok series (20 and more identical power plants) is raised to the level of design philosophy in the Kayser concept: 216 steel tanks and power plants are supposed to form the first stage, another 36 power plants each for the second and third stages of the planned Kayser rocket.

In this way, the monster indeed reaches a launching weight of about 1000 tons, double that of conventional rockets of comparable pay load. But nevertheless, Kayser promises a reduction in launching costs to about one fifth the usual costs - precisely because everything is technically so simple:

- Instead of guiding the rocket by electronically controlled swiveling of the power plants, Kayser's inexpensive projectile is simply guided by turning on or off certain groups of the some 300 individual power plants as required.

- The opening and closing of the power plant valves is done in the simplest manner - with million times tested automobile windshield wiper motors.

- As low cost fuel, a mixture of simple diesel oil and nitric acid is supposed to be used - this, too, is said to be a breakthrough in rocket technology.

"A glass of flat beer against a brewery," is now the stake in a bet made in 1975 by Giesen rocket professor Horst L8b "that this rocket will never fly". For "economic and political reasons" alone, according to L8b, the projectile in its planned form will never raise itself in the skies.

But in fact, it is not merely a question of it ever being able to fly. The decisive questions are when it will fly, how reliable it will be and how much it will cost?

"In principle," paraphrases the Berlin professor for aeronautical engineering Hans-Heinz Koelle, "by means of rockets one can actually bring everything to fly, even barn doors."

To be sure, the question of whether the promised Kayser rocket is truly revolutionary from a technical standpoint and, above all, whether it makes sense technically and economically, have been answered with extreme skepticism so far by noted West German rocket experts.

"Mr. Kayser," states a report of the aeronautics and aerospace concern Messerschmidt-B8lkow-Blohm (MBB), "wants to conquer the future with a concept of the past - a futile attempt both technically and economically."

In particular, the B8lkow technicians objected to the following: "costs cut in one place (for example, power plants) will add to the costs for another part of the rocket (bundling together 216 power plants)." It has been a "known fact for decades" that diesel oil

and nitric acid "burn in pipe chambers". Therefore, Kayser's "costly experimental program" has been fairly senseless.

But above all: "Not a single customer" will be interested in a rocket which holds out the prospect of a pay load price three times that, for example, of the American Space Shuttle - "and in addition, its reliability is more than doubtful". MBB conclusion: "Costly, misguided operation."

Not infrequently, Kayser has chosen risky comparisons to boost his project.

His presumed fuel costs, for example, he always calculates against a high price fuel such as is used only in special U.S. rockets (such as the Titan) or only in the top stages - instead of comparing it with the normal kerosene-oxygen mixture which drives the lower stages of most U.S. and Soviet rockets.

Also, Kayser is silent about the almost incalculable logistical problems faced by his project. If he has his tank pipes produced in West Germany in a factory built specifically for that purpose, then he must freight them over 1000 kilometers to the African bush. It is estimated that the two Argosy transport aircraft owned by Otrag would have to complete about 150 flights to carry to Shaba just the pipes for the bottom stage of one Kayser projectile.



Otrag Rocket arriving in Zaire: "Revolutionary concept with steel canisters bundled together".

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